

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Al Moyle <moyle@essc.psu.edu>
Subject: [17025] 38 Special Problems (longish)
Message-ID: <3.0.32.19970410103732.005b6868@pop3server.essc.psu.edu>

Gang,

As the Church Lady would have said, this one certainly "special". First, a little background ...

My 38 special was not built from a kit. I decided to try building it from scratch on a couple of Radio Shack project boards. Actually, the original idea was to use a single board cut in half with the two pieces mounted back-to-back (thought it would be pretty cute that way), but I couldn't quite manage to miniturize it that much. It ended up being two boards cut to about 2/3 of full length mounted back-to-back with a ground plane made of circuit board material in between. To improve the ground and power traces of the RS boards, I used strips of copper tape 3/8" wide.

The first problem was caused in part by not being able to get the 8 volt regulator on the same boards as the rest of the rig. I built it on a left-over bit of one of the RS boards, then I got stupid (the other part of the problem). In my haste to power things up the other evening, I forgot the 8V supply and connected the rig directly to the 12V supply! Well, no noise in the headphones told me that something was wrong and almost immediately I realized that I had forgotten about the 8V supply. I ended up replacing all of the IC's in the thing, but the results are still pretty weird.

When I connect the rig up to an antenna and then power it up (8V this time ;-)),

I initially hear some signals. However, over a period of 2-3 minutes, the audio fades out until I hear nothing at all. While the audio is fading out, I hear something that sounds like a heterodyne produced by someone holding down the key and tuning across the band. But this is originating in my radio, since I can hear it with the antenna disconnected. Anyway, after a few minutes, the audio becomes very weak, flickers in and out a few times and finally dies. If I turn the radio off for a half hour or so and then turn it back on the audio will return ... for a while.

My audio stage is different from the stock 38 spl ... I didn't have any NE5532's so I used two NE5534's (single 5532?). Before the audio fades out, if I touch the junction of R14 and C16 with my finger I can hear some hum. Not really loud, but it's there. After the audio fades ... no hum. I am always able to hear hum if I touch the inverting input of the second 5534.

The oscillators continue to work throughout the fadeout. The VX0 tuning

range is small (22109570 to 22115354) ... from a cold start to fadeout, it drifted downward by about 60 Hz. The BFO remains stable at 12000523 Hz.

Last evening, I decided to see if I could follow a signal through the thing. So, I set my S&S digital VFO to 10.113 MHz and took a piece of insulated wire from its output and coupled it to the input of the 38 spl by winding it around the antenna input lead a couple of times. I could barely hear the digital vfo in the headphones. However, if I used my oscilloscope to look at the + side of C16, there was a tremendous amount of audio (approx. 0.3V pp) coming out of U3. I would have thought that would have been enough audio, given the gain of the NE5534's, to melt the headphones. One funny thing here is that when I tune the 38 spl to maximize the audio waveform on the scope, the audio is at about 2 KHz! Is this right? I would have thought that would have a hard time getting through the narrow audio filters if they are centered near 500-700 Hz.

One other interesting tidbit ... I didn't make the connection between C17 and the top of C19 yet, so I don't have any drive to the final. However, when I key the rig, I get about 200 mW of output at about 10.7 MHz. I assume that U4A is oscillating at a frequency determined by the C19/TC2/L2 tuned circuit. Hopefully, this will be swamped out when I actually apply drive to the final.

Anyway, there it is ... I'm sorry that this description got so long. I'm wondering if several things may be wrong. What do the 38 spl gurus think? Any ideas would be much appreciated since I'm getting pretty confused.

Thanks es 72,
Al N3KFL

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: gsurrency@juno.com (Gary L Surrency)
Subject: [17032] 38S output filter observations
Message-ID: <19970410.090702.3958.1.gsurrency@juno.com>

Howdy!

I noticed when tinkering with my 38S, that I could get as much as 8-9 watts output with a 1100 to 1200 pf silver mica cap at C25! This is with 13.60 volts DC supply, but even using my 12 volt 7 A/H gell cell it will do over 7 watts! C505 and C26 are both 560 pf S/M.

The output looks clean on my monitor scope, but I don't have access to a spectrum analyzer, so I don't know if the signal purity is clean. It seems to be a nice sounding signal, and the greater output makes the

tuning of TC2 a little broader, and less critical to adjust. Maybe that's due to a greater load on the 74HC240, or less reflected reactance back to it from the output filter.

The 74HC240 doesn't seem to get warm, so it isn't being driven too hard. I am wondering what is the best way to reduce the output level, short of doing the variable power output mod. Maybe I'll try reducing the vlaue of the 220 ohm resistor on the gate, R102.

I don't want a variable output, I would just like to hold it to 5w, so the IRF510 doesn't need additional heatsinking. In he meantime, I put a 1000 pf S/M cap at C25 that gives right at 5w output. Maybe this is the correct compromise, the output signal still looks clean, and the transmitter is stable when TC2 is adjusted properly.

Looks like I need a little change to the T/R frequency offset so I can hear people who are tuned zero beat to my signal. I'll put a small variable at C21 and see what happens.

Now, on to the "thump" mod with the FET switch.....

QRP - I love this stuff....

72,

Gary Surrency AB7MY
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "j.w. thornton" <dub@oklahoma.net>
Subject: [17053] 38S Thump:
Message-ID: <3.0.32.19970410015321.006f3fd0@okc.oklahoma.net>

Well, my 38S has quite a number of QSO's under its belt & is behaving fairly well. About ready to think about sticking it in a case, but before I do, would surely like to quiet the "thumps" down. I have seen quite a few posts concerning the problem, but going thru the info I have saved, I am not finding any FIXES. Has anybody successfully done a FIX, or even a near fix on this problem?? Raising the sidetone level does not help the thumps, but does allow me to at least hear the sidetone.

I know several of you guys have whupped this beast, howdja do it??

Dub

J. W. (Dub) Thornton

QRP-1 # 159
ARCI #6982
NW QRP # 427
Minco, Okla. 73059

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: tahrens1@juno.com
Subject: [16997] 38sps1 - LOUD Foreign Broadcast?
Message-ID: <19970409.165953.4887.0.tahrens1@juno.com>

Wow, there is a really loud foreign broadcast station being received by the 38s. It is louder than all other signals put together!

I have two peaks, and have changed the series cap to th 10pF like others have suggested.

Any ideas would be greatly appreciated.

Right now, it is naked on the bench... I've not tried to put an enclosure around it.. perhaps that would help.

Thanks,

Tim W5FN

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Doug <doug@sunrise.alpinet.net>
Subject: [17043] 40-9er Schematic
Message-ID: <334D20A3.1966@alpinet.net>

Thanks to all those who took time to respond to my request for drawings of the 40-9er...I've got it now. I appreciate all the help and will be off to the bench to make the change...I can do without the thumps.

I also picked up an IRF510, so gonna replace the substitute I've got in there and see if we can raise the output power a touch.

Thanks again...

Doug, K7YD

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Conard Murray <ws4s@InfoAve.Net>
Subject: [17020] 50/40/30 from TN tonight!
Message-ID: <2.2.32.19970410123622.00bf0978@infoave.net>

Hello everyone,
AS posted earlier, I will be on the following QRG :
0000Z-0200Z (7-9 pm CDT 4/10) 10.110 + QRM
0200Z-0400Z (9-11 pm CDT 4/10) 7.050 - QRM

and Marty will be on
0000Z-0200Z (7-9 pm CDT 4/10) 10.115+/- QRM
0200Z-0400Z (9-11 pm CDT 4/10) 7.115+/- QRM, probably first lower
spot available.

so there is no excuse for not working us, unless that CME takes us out. If
so, just call on the phone. I won't be able to hear Marty, so if we are too
close to each other, just tell one of us.
Hoping for a good run,
73,
Conard

- - - - -
Conard Murray WS4S Glowbugs listowner ws4s@infoave.net
217 Dyer Avenue Cookeville, TN 38501 615-526-4093
Member Arizona ScQRPions QRP-L #993 Friend to anything TCS or GRC-19
<>< Wise men still seek Him ><>
WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [17005] 50/40/30 WAS Reminder
Message-ID: <334c43f8.410677428@smtp.usit.net>

Just a reminder -- I'll be looking for QSOs on 10.115 slightly under
24 hours from this writing (8:35pm CDT, 4/9/97) and 7.115 two hours
after that ...

0000z to 0200z 3/11/97 Friday (7pm-9pm CDT Thursday) -- 10.115
0200z to 0400z 3/11/97 Friday (9pm-11pm CDT Thursday) -- 7.115

All plus or minus QRM, probably minus QRM.

I'll be breaking in a new (to me) Yaseu FT707, cranked down to 5 watts with no filtering! I might pop in the RS DSP if the urge hits, but I'm hoping for good results on the stock 800Hz CW filter. Since I'm the one being "hunted", I thought you guys deserved the "big guns". I'll still use the MFJ/38s combination for my hunting activities, I suspect.

I have a terrible cold, and will probably be somewhat medicated at the time. Keep me busy, else I fall asleep at the key! CW and NyQuil don't mix, I suspect ...

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: ac4gt@juno.com (nathan c tart)
Subject: [17000] Cary Oler <oler@holly.cc.uleth.ca> (by way of "Brian K. Short"
Message-ID: <19970409.191220.8119.19.ac4gt@juno.com>

----- Begin forwarded message -----
From: Cary Oler <oler@holly.cc.uleth.ca> (by way of "Brian K. Short" <ke7gh@primenet.com>)
Subject: [Mobile/Portable] Solar Flare Disturbance Update - 09-10 April
From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "J.B. Fox" <w5hir@mail.phoenix.net>
Subject: [16999] Doug DeMaw's Noise eliminator
Message-ID: <199704100109.UAA02864@raid2.fddi.phoenix.net>

Okay, so I klutzed up. I thought I had the information concerning the receiver front end "balanced" qrn eliminator (can't remember the name of it)
Was the article published in QST, 73, CQ or what??? Please someone help this poor mental cripple HI!

Foxy- w5hir@mail.phoenix.net

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "JOEL DENISON" <jdenison@morelr.com>
Subject: [17023] Echo echo echo
Message-ID: <19970410082114.181c34da.in@master>

High Guys:

While I have not heard the "echos" I have read accounts of people receiving

qsos of hams long after their death. I have heard and I presume most everyone has heard the echos from multipath signals so I see no reason to doubt two fine qrp opeators who are hearing themselves twice.

I would be reluctant to bring up the sanity issue as there are other grounds to lose that, not just echos. Why, just being a qrp operator makes one suspect by many... :-)

God Bless
Joel

WA5CVM

Joel Denison

Gentle Lady (RC Sail Plane)(049 engine - high start)

81 High street

40 mtr dipole up 40ft

Farmington, Maine 04938

QRP ARCI 4066 NEW ENGLAND QRP 476 QRP-L 765

jdenison@morelr.com

AK/QRP 109

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Randy Hargenrader <randyh@harksystems.com>

Subject: [17009] echos on 80mtrs

Message-ID: <334C57D8.5917@harksystems.com>

Hmmm.. don't know if I should report this or not!! :)

I'm hearing echos of my cw on 80mtrs at 0258Z (4/9/97).

At 5 watts they are barely noticable, at 10 watts definently there.

Anyone else notice this phenomenom? Anyone else brave enough to admit it?

--

73, (Sir)Randy WJ4P

Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Mike Duke <gmduke@oscar.teclink.net>

Subject: [16994] EURICA! THEY FOUND IT!

Message-ID: <Pine.GS0.3.95.970409184312.15030C-100000@oscar.teclink.net>

My Argonaut was lost, but now is found. After being told yesterday by UPS to file the claim, and, after talking with Ten-Tec once more to confirm it as a no-show, UPS called today to say they had delivered it. A second call to Ten-Tec confirmed it. What a marygoround! I want off; just fix my new toy.

Sorry, folks; I'm keeping the filter now.

73, de K5XU

Mike Duke,
Jackson, MS

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Jim Hydzyk <congress@magpage.com>
Subject: [17070] For Sale: Lots of HF--UPDATE 1
Message-ID: <199704102137.RAA07465@alaska.magpage.com>

This is an update of what's left of the big list. Yea, the Ramsey Station installed in the 1977 Olds 98 has been sold. Really.

Added to the list is my old SIMPSON 260 WITH WOODEN CASE BOX and the
SIMPSON Model 655 Microvolt Attenuator Adapter
MAKE OFFER!

>Hi Gang,

>

> Some of you already know that for health reasons, we are moving South and right now it looks like 30+ years of marriage and 37 years of ham radio are moving into a small condo in southern NC. See if there is anything you want before my son takes it to a hamfest next month.

>

>Yaesu FT-840 w/CW filter, like new/boxes/manual/hand mic/DC cord \$650
OR WITHOUT FILTER FOR \$575

>Timewave DSP-59+ with manual, vy clean \$140

>B&W FL-10/1500 TVI Filter (vy low loss), \$25

>MFJ-16010 Tuner, vy gud shape, used on R-4B every day, \$25

>Kenwood AT-200 Tuner, vy clean \$95

>Radio Shack Patrolman 3A Lo-HI-UHF Tuneable receiver, vg condx \$25

>Radio Shack Patrolman SW-60 AM-FM-SW(6-16 MHz)VHF-Lo/HI/Air/UHF

> I bought it new and use it as bedside radio, vg shape \$35

>Drake MS-4 Speaker \$45 (nope, the rcvr's aren't 4-sale)

>Ammecom S225 2-Meter xcvr. Havent used it in years, but works,
> with microphone and original manual, not vy pretty, \$75

>Astatic D-104, wired for Drake T-4X/TR-4 series, with G-Stand \$40

>ARRL Handbooks, 1980 fair condx, \$10
> 1985 gud " \$14

>Datong FL-3 Auto-notch audio processor/filter w/orig. box>manual \$125
>
>Plus shipping, except for Ramsey/Olds 98 package...XYL will deliver with
> title within 800 miles. There's a lot more junque too so if you're
> coming by, being a large vehicle. Will consider a Yaesu FT-10 or FT-50
> in trade.
>

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: cc013@ccosmo.net (Cosmo Computers)
Subject: [17006] FS:QRP Plus new Eprom
Message-ID: <19970410020446725.AAA159@alan>

For Sale: Index Labs QRP Plus with new Eprom... In very nice condition
with
mic, power cord, manual, original box. All in excellent condition.. \$475.00
OBO
73, Lee cc013@ccosmo.net

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Ron Giuntini <rong@slip.net>
Subject: [17072] Heat Sink f/38S
Message-ID: <E0wFSkN-0003Ty-00@ferret.slip.net>

Has anyone had good luck using aluminum heat sinks on the IRF 510
rather than using the case as a heatsink? I have both types that RS sells,
and will use the extruded (4 fins) type unless I hear that I need more...I
am going to use the single thinner type of heat sink on the 7805. Any
opinions on the amount of metal neecessary to do the job?

Ron, KB6GK

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Roger Hightower <n7kt@dancris.com>
Subject: [17042] Increase your code speed in a fun way
Message-ID: <334D194C.43E2@dancris.com>

Dave, AI7R and I are running a CW class for our club, and have 21 students attending sessions. Our main program is to get the students up "on the step" at 24 wpm character recognition; the word speed will come up as we go along.

As a learning tool, Dave picked up some of the MFJ418 Morse Code Tutors with LCD. I have to say this is a quantum improvement over the old 411. This little machine can do it all, and I now carry one around with me set to 28wpm just to keep in practice wherever I am.

Check this thing out. If you need some help improving your head copy, this can do it.

I'm not a real strong fan of things MFJ, but this is the best product I have seen from them. Paid retail for mine (didn't even take the club discount, :-)) and have no connection with MFJ.

72/73, de Roger N7KT

--

72/73 de Roger N7KT n7kt@dancris.com Mesa, AZ Grid DM43cj
NorCal 40-9er, NC38S, NC-40A, Cascade, Sierra, OHR400, HW-9
NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Rogerio Gonzaga <gonzaga@med.up.pt>
Subject: [17018] INDEX LABORATORIES QRP + DISCUSSION
Message-ID: <199704101623.SAA11072@mail.med.up.pt>

Hi, folks,

I have been reading the mesgs about the fate of Index with much interest and a lot of concern. Actually I have recently written a couple of articles in the main portuguese radio magazine, where I am trying to raise the QRP flag in CT1, and I have made a very good appreciation of my own QRP++, one of the very few existing in Portugal (maybe there are only another one or two). The articles have raised a certain interest in possible buyers, but I am sure that if in a further article I reported that Index had let us down and that a "new QRP +" was going to be born under another name and from another company, with a loss of our possibility of getting assistance, service and parts for the old one, no one would trust and buy it around - CT1s are not that stupid!

This reminds me that in the main reflectors of QRP (the QRP-L and the GQRP-L) are probably present more than 10% of the possible buyers of the new rig, as well as representatives of the main QRP Clubs (G-QRP Club, NorCal, QRP ARCI, etc. etc. etc), whose newsletters eventually reach more than 90% of the potentially interested buyers, and I suppose that a subject of this importance would sooner or later be noticed in those publications, at least about the prices of the used equipment falling down. This makes me hope that the responsables for the old and new rigs will not be willing to let us down, as the probability of selling well the new rig would then be rather scarce.

I will be looking forward to their reaction when our concerns and eventually our claims will be personally presented to them by the members of this list. I sincerelly hope that everything will be OK, and that reasonably the new and/or the old team will be back giving assistance to the previous costumers in the near future. I do love my QRP+ and would be very disapointed to look at it as a failed venture.

Please keep on feeding the discussion!

72/73 de Roger, CT1ETT

Rogério A. F. Gonzaga, MD, PhD
Surgical Professor at the Faculdade de Medicina do Porto - Portugal
Ex-Honorary Surgical Registrar at the Hammersmith Hospital - London, UK

Radio Amateur CT1ETT QTH Loc IN51re
G-QRP Club # 8673 ISWL # CT-20574 QRP-L #516

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: torell@sicom.com (Kent Torell)
Subject: [16995] latest prop. news
Message-ID: <v02130507af71d9fbdd4d@[192.91.202.41]>

The forecasters are arguing over when the latest CME will hit. Jump on those radios now!

excerpts:.....

The large solar coronal mass ejection disturbance is expected to impact with the Earth anytime over the next 24 hours. The SOHO team operating the LASCO EIT and WAVES instruments that detected this disturbance expect this disturbance to arrive by about 00:00 UTC on 10 April (within the next hour). The forecasters at the Space Environment Center are expecting the disturbance to arrive at about 12:00 UTC on 10 April. Suffice it to say, it should arrive within the next 24 hours. Arrival times have been based on different data derived from the activity observed on 07 April. Data based strictly on ground-based flare-related information originally suggested the disturbance may not arrive until late on 10 April or early on 11 April. Our original forecast was based on this preliminary data.

Data now appears to favour an earlier arrival time, probably closer to the Space Environment Center derived times.

The resulting geophysical disturbance is expected to be moderate in strength. There is the potential for geomagnetic activity to surpass minor storm levels with periods of major storming possible over short periods from middle and high latitude regions.

Ionospheric radio communications in the HF bands is expected to be initially enhanced for a few hours following the arrival of the disturbance, followed by a rapid period of degradation that should persist through to about 12 April. High and polar latitude paths should be most strongly affected with increased absorption, fading and multipathing. Transpolar and transauroral circuits will be hardest hit with periods of poor to very poor propagation expected about 6 to 12 hours after the disturbance arrives, coinciding with sometime after about 06:00 to 18:00 UTC on 10 April. Propagation probably won't improve considerably on 11 April. Middle latitude paths should see fairer conditions with periods of fair to very poor propagation occurring during the local night sectors, particularly on the upper-middle latitude circuits that cross nearer the expanded auroral ovals.

Current near-realtime updated global maps of ionospheric characteristics can be found at: <http://solar.uleth.ca/solar>. For instance, a map of maximum usable frequencies is at: <http://solar.uleth.ca/solar/www/realtime.html>

.....

Kent Torell torell@sicom.com 602-607-4852
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB70A scQRPion 6,qrp-1 57,ARCI 9075 DM33xn 33.55 N 112.078 W

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [17071] LDG group purchase order placed
Message-ID: <Pine.3.89.9704101602.C4617-0100000@w3eax.umd.edu>

I placed the order today. It will probably be Monday before everything's shipped due to Jennifer at LDG having to assemble a few more kits.

Patience, folks, patience.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 140 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Kirk Staats <AA4YZ@postoffice.worldnet.att.net>
Subject: [17001] long, long wire antenna question
Message-ID: <19970410014315.AAA10871@LOCALNAME>

Purchased property in the country and I now have lots of room to hang wire for my qrp rig. I am thinking of putting up a large loop (2000ft + of wire) or a dipole configuration with 500ft + elements fed by 450 ohm feed line. Question: What can I expect from these large antenna's. Will they be to directional. Will I be able to tune them for use on 20m & up with a basic MFJ tuner. Any suggestions regarding antennas?

73
Kirk
W3AW (QRP 100%)
Canton, Oh

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Michael Connor" <mikec@primenet.com>
Subject: [17066] Luke's birthplace
Message-ID: <199704102105.0AA20540@primenet.com>

>From available data, Luke was apparently born on the
"Republics capital city-planet Aquilae".

Oh yea, he was an avid inter-galactic qrp'er...

DX to Luke was a completely different galaxy.:-)

Mike
NQ7K

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [17021] MD meeting
Message-ID: <199704101242.NAA11649@chuck.dallas.sgi.com>

Gang,

Due to work scheduling I will be unable to make tonight's (Thur)
meeting at TJ's. It is just one of those things that happens
and can't be avoided.

Hope to catch everyone next trip out here.

dit dit
Chuck Adams K5FO CP-60 adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/
WIMPS: Qs=006 30m=3 17m=3 12m=0 States=03/03/00 DX=00/00/00 QSLs=000

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: wa5whn@juno.com (Jay D Miller)
Subject: [17030] More on the Coronal Mass Ejection from Our Sun/QRPTTF
Message-ID: <19970410.083609.4463.0.wa5whn@juno.com>

QRP-Lers,

I N C O M I N G !!! Photos to follow;

<http://umbra.nascom.nasa.gov/images/latest.html>

As W5BI tells me, make sure You have a hat on & are wearing #25
sunscreen. ;-)

T minus 15 days until the NorCal QRPTTF, remember "Strange People, with small radios, in strange places." or was it "Small places with strange radios" ? ;-) That's it, my NorCal 38S is haunted, it thumps, chirps & makes strange sounds, without me being present.

72...Jay, WA5WHN

DM65qd

<http://www.flash.net/~w5bi/>

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: wj50@juno.com
Subject: [17040] not primary list subject but,
Message-ID: <19970410.113310.3614.6.WJ50@juno.com>

Sorry that I need to make the entry of my E-mail difficulties on the list--I've exhausted other means.
My internet server is AT&T Worldnet.
Messages to AT&T just refer me to the "help" files---read them several times.

Via my WJ50@worldnet.att.com I can only read my mail if I print it out.
Why can't I read it off the screen? Am I missing something? I can't seem to find the proper procedure to access the mail.
Any AT&T subscribers help?

73

Bill Also WJ50@juno.com

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Marshall Emm" <mgemm@ntechnologies.com>
Subject: [17034] OHR SCAF Mods
Message-ID: <199704101615.KAA06917@lynx.csn.net>

Gang--

Joerg had some nice things to say about the OHR Scaf and I'd like to add 2 cents worth.

Main things he didn't say were that you can open it out to around 2400 Hz making it useful for SSB, or narrow it down to 108Hz without

appreiciable "ringing". In the 108Hz setting the thing works like a "zero beat" indicator, too!

Did I say mods? Yes I did, up in the subject line. OK, my situation was that I wanted to use the SCAF with either of two rigs having substantially different audio output (the OHR400 has fairly low output and the IC735 has multiple watts available), so I wanted to be able to add in some amplification. I also wanted to use either headphones or an external speaker (my brief AF career is paying off now in high frequency hearing loss, and I find a speaker a little more comfortable most of the time).

Also, my "rev 1" SCAF is non-op when switched off-- have to take it out of the circuit. I think a later version introduced a double-pole switch which acted as a bypass when the unit is off.

So... design goal was to select either of two inputs, and enable either an audio amplifier or the SCAF, or both. I decided not to worry about switching the input-- it comes from the headphone jack which is on the front of the rigs, so it's easy enough to swap over, but did the other two.

The arrangement was to add a speaker jack on the back of the unit (wired to the already available switched connection on the SCAF's headphone jack) so the speaker is on until/unless I insert a headphone plug.

Two DPDT switches control both audio and power switching, and I put LEDs on the hot side of the power switches so I can see what's on.

I can't do a schematic or even a block diagram very well here so I'll try to do a "virtual block diagram" in text. The two switches are for the SCAF and the audio amp (an RS LM386 amp which fits neatly inside the SCAF case. One side of the switch controls audio, the other controls power.

Looking at the thing from the input side, the signal first encounters the SCAF switch. It goes to the center terminal on the switch, which sends it either to the SCAF unit or to the audio switch. In the on position, the other side of the switch sends +12v to the SCAF unit and lights an LED.

The output from the SCAF is tied to the "bypass" audio line from the SCAF switch-- one side or the other will be dead, depending on the switch position-- and then to the audio amp switch.

The audio amp switch is set up the same way-- one position bypasses the amp (and turns power to the amp off) and the other goes to the

input of the amplifier. The "bypass" audio line from the amp switch is tied to the output from the amplifier, and goes to the source connector on the headphone jack.

The SCAF was wired internally with ordinary hookup wire, and the SCAF was a bit susceptible to RF (principally from my nearby 2M rig), so I did all the internal audio wiring with mini coax.

While I was at it, I replace the "gain control" trim pot on the audio amp with an off-board pot on the back of the SCAF enclosure. It's not really a gain control, of course, just a 50K pot across the input to the amp.

The external speaker is a 10" Jensen PA speaker that I got at a swap fest for a buck, and unlike the car speaker and the RS speaker that I tried, will not distort when driven with a full power (1W) signal at 700Hz.

It works very well, and makes a world of difference in terms of convenience.

73

Marshall Emm

AA0XI/VK5FN

aa0xi@mtechnologies.com

<http://www.mtechnologies.com/mthome>

73

Marshall Emm

AA0XI/VK5FN

aa0xi@mtechnologies.com

<http://www.mtechnologies.com/mthome>

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: joerg.behrens@ubs.com

Subject: [17017] OHR SCAF: wow!

Message-ID: <H00005820570f444@MHS>

--MimeMultipartBoundary

Content-Type: text/plain; charset=ISO-8859-1; name="message"

Content-Transfer-Encoding: 7bit

Hello QRP gang

For those of you who have read about the OHR SCAF but have never actually seen or better heard one: I believe I haven't spend any

money on a more useful kit than the SCAF for some time! And I've bought quite a few... Same great quality and nice type of enclosure as all other OHR kits. Look at OHR Web page for special offer.

Usual disclaimer: No links to OHR etc...
73 de Joerg

--MimeMultipartBoundary--

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Bob Reynolds <breynold@sigg.com>
Subject: [17027] Parts needed
Message-ID: <97Apr10.101912cdt.19673@firewall.sigg.com>

NEEED:

3 grey knobs for DX-60B/HR-10B

Function switch assembly for SX-100

Thanks, Red K5VOL

breynold@sigg.com

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Paul Stroud <aa4xx@amsat.org>
Subject: [17002] Portsmouth Island - Preliminary Report
Message-ID: <334C46FB.287B@amsat.org>

Hi Gang,

Several of you have asked for a preliminary report on the KnightLite's QRPedition to Portsmouth Island last weekend. First off, thanks to all of you who made a special effort to work us--and there were many of you! The 20/30/40 and 80M logs include a number of QRP'ers from many US and Canadian call districts. Some of you worked us on multiple bands. K4HQ, our QSL manager, will be posting the log within the near future.

The Portsmouth team consisted of AA1BK, AE4IC, WJ4P, K4HQ, WB4OFT, WA4NID, and AA4XX. WA4NID's wife Xiao-Ping, son Mark, and parents also accompanied us. We all met at the ferry on the NC mainland around 2PM

last Friday afternoon. All of us were pleased to see that our island destination was somewhat visible, about six miles east of us across the Pamlico Sound. The weather was picture perfect, and after an exciting 40 minute crossing, we stepped onto Portsmouth Island!

The next few hours were given to raising our antenna farm. AA1BK's Gap Titan and WB4OFT's beautiful homebrew 30M vertical went up without a hitch. The whole team pitched in to raise the 3-el triband beam on a 40 ft telescoping mast--At least that was the plan. The mast started bending in the middle, so we had to lower it to the ground, unbend it, and rethink our plan of attack. WJ4P volunteered to climb onto the roof of our cottage, which enabled us to pull the mast from a higher angle. We all held our breath as the mast finally decided to behave itself and go vertical with our beam still hanging in there. A quick check with the RF-1 analyzer should good SWR's on 10/15/20M with the beam. Hot dog!! AA1BK then began putting up his Carolina Windom and had it going in short order. That left the 40M phased vertical array, but we were running out of sunlight by that time. Wanting to try for some 40M runs into EU Friday night, we decided to raise the two 40M verticals (homebrew 40M "walking sticks", quarter wave long and quarter wave spaced). By flashlight we got both verticals secured and four radials planted for each vertical. More radials would be added in the morning to reduce the effect of mutual coupling between the 40M phased array and our other antennas--all of which were in close proximity to one another. Saturday afternoon, WJ4P constructed an 80M OCF dipole, fed with ladderline, which gave a very respectable account of itself, enabling us to work fellow QRP'ers on 80M later that night. This gave Randy another excuse to climb back onto the roof. :-)

The pictures from our trip have just come in. I'll try to get them uploaded to the KL Webpage over the weekend. We've got some group shots as well as pictures of the island, our antennas, and individual operators. The big swarms of mosquitoes fortunately never materialized. That probably had to do with the fact that Summer had not yet made its appearance.

We spent most of our time on 20/30/40/ and 80M--QRP exclusively. Our youngest team member, 16 year old Andrew Lewis-K4HQ, showed us how to lay a choke hold on the 20M SSB IOTA frequency. For the duration of the weekend, Andrew worked several hundred Europeans, including some Russians, EA8's, and VK6's while running 5W SSB on 20M. It was incredible to hear so many DX stations calling WQ4RP!! Andrew had several long sessions of pileups throughout the weekend. We hoped for similar pileups on 20M CW with the beam, but they never materialized.

WB4OFT ran a laid back station on 30M. John set up his station outside on a picnic table about 10 feet below the rest of the stations. It was a pleasure to sink our feet into the sand and operate his newly

constructed GM-30, along with his new 30M vertical. John ended up contacting quite a number of domestic stations and some Europeans. Around sunset Saturday night, John worked a cargo vessel off Cape Hatteras who was running a Sierra. The /MM station was mightily surprised to snag a QSO with John on nearby Portsmouth Island, also running QRP.

WJ4P has a love affair with 80M. Randy's OHR400 did it's usual FB job on 80M. Although the band crashed around 8PM Saturday night, we were still able to work a group of QRP'ers who were waiting for us on 3560 KHz. Several Europeans were called, but all we got was "QRZ QRP?"

Most of us operated different bands during the weekend. AA1BK monitored 15M, but apparently there was not much propagation on 15M. Saturday night around sunset, the first wave of Europeans appeared with S9 signals. It was exciting to add about 50 Europeans to the 40M log that night, running the phased array. AA1BK added Norway and Switzerland as new countries on 40M. WA4NID, AE4IC, and AA4XX also added new countries to the 40M log--mostly Europeans, along with a few Russians, and a VK near Sydney. Well after midnight, N6MM/QRP and fellow West Coast QRP'ers were well over S9. It was fun hearing those big QRP signals on 40M. Thanks, guys.....

Sunday morning around 10AM we took down the beam, after another sustained pileup on 20M SSB. A W6 station was heard making the remark, "We can't stop those Europeans from calling that QRP thing on Portsmouth Island." Not bad for 5W, huh?? :-)

This was a trip I'll always remember. The camaraderie was great, the propagation was good, and the response was at times unbelievable. At one time, WA4NID was running 2W SSB on 20M and the DX just kept on calling. We have made a videotape of our operation and will be sharing it at area hamfests. On several occasions we have close ups of the Oak Hills Wattmeter while running pileups--just to convince folks that we really were running QRP.

We'll let you know when the pictures are available on the website. Again, thanks to all our QRP friends for helping to make this adventure a success.

72,

The Portsmouth Team AA1BK, WA4NID, WJ4P, AE4IC, WB4OFT, K4HQ, AA4XX

Portsmouth Wepsite: <http://www.ipass.net/~aa4xx/ocra1.htm>

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: torell@sicom.com (Kent Torell)
Subject: [17029] PROP: solar cycle / flare news (LONG)
Message-ID: <v02130501af72b2904841@[192.91.202.41]>

Here is a bulletin from Cary Oler, with some discussion on the upcoming solar cycle, and the forthcoming geomagnetic disturbance.
-----Kent-----

From: Cary Oler <oler@holly.cc.uleth.ca>
Subject: NEW SOLAR CYCLE STATUS & CURRENT SOLAR FLARE DISTURBANCE INFO
From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: wa5whn@juno.com (Jay D Miller)
Subject: [17064] QRP Mobile on 17 & 15 meters
Message-ID: <19970410.125551.4559.0.wa5whn@juno.com>

QRP-Lers,

Today (UTC 10, April, 1997) solid 569s into New England (Boston area) @ 1925 UTC on 17 meters & 559 into Florida on 15 meters @ 1845 UTC. 5 watts (Ten-Tec Scout, into a roof mounted 9115 & 9117 antenna). They were QRO types, and were impressed. Hey, so was I. ;-)

How about 18.072 MHz (CW) as the QRP calling frequency on 17 meters ? This is fun stuff mobile, whilst dodging traffic, in New Mexico, ah a true blood sport. There is no 2nd place.

Where's the rest of the QRP-L Crew ?

18.072 MHz ...Jay, WA5WHN/qrp
(sometimes mobile) DM65

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: HIMES@idic11.idi.oclc.org
Subject: [17050] QRP_SPEAKERS
Message-ID: <01IHJKFVQU42AR3PSE@idic11.idi.oclc.org>

<< Anyone have any suggestions for a small speaker to put inside QRP rigs?
>>

Most of the good speakers will be at FDIM presenting papers on May 16th. And my recollection is that they are all much too big to fit inside a QRP rig--mostly too tall, but some too wide too!

....Couldn't resist.

Preston WJ2V

Probably more audio than I'd need too...

...neither could I.

Marty WB8FNH

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: HIMES@idic11.idi.oclc.org
Subject: [17044] QRP_SPEAKER_RECOMMENDATIONS?
Message-ID: <01IHJIMYP00YAR3PSE@idic11.idi.oclc.org>

Anyone have any suggestions for a small speaker to put inside QRP rigs?

Marty WB8FNH

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Doug <doug@sunrise.alpinet.net>
Subject: [17011] Schematic for 49er?
Message-ID: <334C5FCB.15FB@alpinet.net>

Hi folks...just looking for a place to find a schematic for the 49er so I can complete the "thump" mod for the 38S. I've looked at the Norcal page...perhaps not in the right place, but didnt find it.

Any ideas?

Thanks ahead of time...

Doug, K7YD

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Roger Hightower <n7kt@dancris.com>
Subject: [17041] SGC and the QRP-L bunch
Message-ID: <334D1804.211B@dancris.com>

I still regret having sold my original QRP+, but didn't replace it with the ++ because of the price increase. The SGC announcement sounded interesting, but I'm not going to go for the new unit until I read comments from those who have.

Anyway, I wonder if SGC is really aware of the size of the market, and the position that the qrp-l group has in the qrp community? With over a thousand members/readers/buyers we do have some influence in the marketplace.

SGC: Are you reading this? Do you care? If you really pay attention to what's being said on this list, you could move a few hundred units. If you don't, the product is a bust from the get-go.

73, de Roger N7KT

--

72/73 de Roger N7KT n7kt@dancris.com Mesa, AZ Grid DM43cj
NorCal 40-9er, NC38S, NC-40A, Cascade, Sierra, OHR400, HW-9
NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: gsurrency@juno.com (Gary L Surrency)
Subject: [17063] Speaker in a QRP box. (long)
Message-ID: <19970410.125751.4422.0.gsurrency@juno.com>

Just thought I'd pass along a casual observation.....

When I place my R/S DSP unit on top of my LDG QRP autotuner, which is also sitting on top of my OHR100 20m rig, the frequency of the '100 shifts a bit. It must be that the magnetic field of the large 3-4 inch loudspeaker in the DSP is somehow affecting the '100s VFO circuit. It is NOT due to flexing of the metal cabinets, since the OHR100 has a fairly heavy top cover, and just holding the DSP over the rig will cause this to happen, even without contact with the cabinet.

So, there must be some kind of Hall effect here, or something similar from the magnetic lines of force reaching the internal circuit of the OHR100. It has a varactor tuned VFO, so is this a known phenomena of varactor diodes, or is the toroid's permeability being cahnging by the magnetic field of the speaker?

Seems I remember somewhere in my electronic studies, that a YIG (Yttrium-Iron-Garnet) sphere can be tuned in the microwave region by the application of a magnetic field. Is this similar to what is happening here?

See 1995 Handbook, page 14.31.

In any case, it might be possible that a speaker's magnet could have a deleterious (I love that word!) effect on the tuned circuits in a QRP transceiver. More than the VFO could be affected, such as the tuned resonance of various bandpass filters if it is the toroids that are

susceptible to extraneous magnetic fields. Of course, a magnetically shielded speaker, like the ones used near TVs and computer monitors, could reduce / eliminate this effect.

I as write this, I just had the idea to go and get a rather large magnet from an old car speaker that I use to find lost screws in the carpet and grass. Upon placing it near the S&S Tac-1, I found that it only had a small effect on a steady carrier that I tuned the rig to. Since the top cover is steel, and probably offers some magnetic shielding, I had to place the magnet under the aluminum bottom plate of the case to cause the frequency to shift a little. Since the Tac-1 uses a PLL, and not very much shift was noted in the received carrier's frequency, and only when the magnet was directly below the PLL loop inductor area.

The OHR100 was MUCH more sensitive to the magnet's proximity. Even though it has a VFO in the 3.410 Mhz range, and the Tac-1's PLL loop runs at 36.4 to 38.39 Mhz! A testimony to PLL stability, to be sure!

I suspect the toroid is being affected by the magnet, and NOT the VCO's PLL varactor diode. This is interesting behavior, and if you had just calibrated your rig's tuning dial, and then put the cover on with a speaker mounted in it, you might be puzzled as to why the dial calibration was off !!!

By the way, on the OHR100 when bringing the magnet near, I was able to shift the rig's frequency by more than a kilohertz! The effect is quite pronounced!

There is no doubt that a 60Hz hum could be induced on your rig's signal if there is a strong magnetic field near it from a light or power supply. Look out for that!

Those high intensity lamps have a 12v transformer in them that could make your signal have hum!

It also would seem that any wiring or circuitry carrying a lot of current should be kept away from the VFO inductors to prevent unintended modulation. This could be a factor in portable operation, or even in a rig that runs the power leads right alongside the VFO circuits. You could get a warbling VFO tone from just keying the rig, as the PA draws relatively high current!

On the other hand, you could use this as a method of amplitude modulation for AM or RTTY! Why, if it is the toroid as I suspect, you could put another winding on the VFO inductor and feed it with a AF signal to modulate it with whatever intelligence (!) you want! Amazing! Did I sleep through this phenomena during electronics classes? Or have others noticed or known about this? <:-o

So the next time you visit your local ham club, bring a strong magnet with you and apply it near your guest's radios without letting on what you're doing. He will undoubtedly be surprised when he hears the rig's frequency wander all over the place! (Unless he is on this list!) One of the small, powerful Neodymium ones would be perfect! Just watch it near computer disks!

This is some interesting stuff I discovered here while goofing around. Maybe you guys (and gals) already knew about this.

I can see it now..... someone places their stereo boom box on top of their QRP rig, and gets reports of Led Zeppelin riding along in the background on their signal. Mysterious voices in the ether.....

Now, I wonder if my 38S will do this? Yes, it does to a small degree. Even if I place the magnet over the VXO or U3, the transmit / receive mixer-oscillator. And there are NO toroids (there is a inductor in the VXO circuit, however) in these circuits to be affected by a magnetic field! So perhaps some of the other components are also affected by magnetism. Is it the diodes, caps, IC's or what? It seems U3 and its surrounding circuitry is also susceptible. Strange.

Try it and see what I mean. Sorry for the bandwidth, but it was an interesting thing to observe. Very interesting and odd, too. There are some people who say they can detect a magnet held near their head. No, I'm not one of them. Although I did have a MRI once, and it tickled a bit. :-)

72 for now,

Gary Surrency AB7MY
QRP-L #571 Chandler, AZ (near Phoenix) Grid Square DM43BH
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Bill Todd <bill@techline.com>
Subject: [17014] Star Wars Trivia - really NOT QRP related
Message-ID: <1.5.4.32.19970410054951.00696a14@mail.techline.com>

Ok guys (and gals) -

Call me irresponsible for asking a non-QRP question here.....but here goes.

Does anyone know the name of the world where Luke Skywalker was raised?

The correct answer will earn you 10 points*

Thanks - Bill-N7MFB

* 20 points will earn you a trip for two to Backscratch, Washington.
The location of this years National Buffalo Chip Flipping Contest

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Bill Todd <bill@techline.com>
Subject: [17016] Star Wars Trivia - really NOT QRP related
Message-ID: <1.5.4.32.19970410063515.0069c0ac@mail.techline.com>

>Date: Wed, 09 Apr 1997 22:49:51 -0700
>To: nwq-1@scn.org
>From: Bill Todd <bill@techline.com>
>Subject: Star Wars Trivia - really NOT QRP related
>Cc: qrp-1@lehigh.edu

>Does anyone know the name of the world where Luke Skywalker was raised?

Gosh folks..I guess I get to win my OWN contest!

I just located a Star Wars Web site and got the correct name of Luke Skywalker's home world. It was called "Tatooine".

Better pack my bags for Backscratch (I already had the other 10 points for correctly figuring out this years' Income Tax form).

CUL, Bill-N7MFB

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Wa2eaw@aol.com
Subject: [17007] static chg bleed off,help
Message-ID: <970409221551_-769215653@emout15.mail.aol.com>

To all;

I intend to use my parafoil kite to raise a long wire antenna. I am concerned with static charge build up. Dont want to fry the HW-8 or me.

How is the best way to rid the antenna of the static charge (bleed it off) with out deteriorating the qrp out-put. (please Miss Brenner, if you are still alive, forgive my missuse of grammer and the horrid run on sentance.)

72/73 de WA2EAW...Bob

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Vic Blackwell" <blackwel@tlcnet.muohio.edu>
Subject: [17054] T-R switches
Message-ID: <9704101857.AA11528@tlcnet.muohio.edu>

T-R Switch:

Hi Gang.

Does anyone have a circuit for a T-R switch I can use in the following manner.

I wish to use a milliwatt level qrp-xmitter along with a separate receiver or transceiver ie. my TT-1340. I would like to do automatic switching back to receiver after keying transmitter.

I could do it with manual switches, but what the heck, go modern.

I worked a station using flee power, made my three watts an embarrassing overkill. So I would like to make a smaller rig and get down into the micro-power class.

Any ideas for the T-R switch?

de vic ad8k . . .

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [17046] Test Equipt Parts Help
Message-ID: <M1404314.009.fnymd.1.970410174455Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/PRMD=MOT/ADMD=MOT/C=US/@MHS>

I just picked up a nice Boonton model 92A RF Millivoltmeter at our local ham flea market.

It has the probe and cable with it, but the screw-on probe tip is missing. I checked with Boonton, and they want \$60 for a new tip!

I'm wondering if there might be any other sources for a compatible tip for this probe. At this point, the probe tip would cost almost double what I paid for the unit :-) Anyone know of an aftermarket source of add-ons, accessories, etc?

72, Bob N6WG

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: wj50@juno.com
Subject: [17065] Thanks for response AT&T Email
Message-ID: <19970410.151645.3614.19.WJ50@juno.com>

Thanks all
It's amazing the un-tapped knowledge on the list----When someone needs anything--all one has to do is ask.
I appreciate the comraderie (sp?) of the list.
TNX ES 73 Bill WJ50

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Vic Blackwell" <blackwel@tlcnet.muohio.edu>
Subject: [17026] Toroids, Distrubuted Capacitance
Message-ID: <9704101505.AA01273@tlcnet.muohio.edu>

Distributed Capacitance:

Hi Gang,

I hate it when I remember I forgot something.

Years ago I was taught a method of measuring distributed capacitance. It was some sort of scheme where you put a capacitance across a coil and measured the resonant freq. then you added twice the capacity or maybe you used 1/2 the capacitance and the freq would change. Or maybe you went to twice the freq and looked to see how much capacitance it took to do it. Then some sort of equation was worked out and from it you knew the distributed capacitance of you coil. Does any of this make sense or enough of a clue for someone to tell us what the methods was?

I think this may be useful to answering some of the questions that have been coming up about toroids.

de vic ad8k . .

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Vic Rosenthal <rakefet@rakefet.com>

Subject: [17057] Tuning headphones

Message-ID: <334D41C9.2822@rakefet.com>

There's been a lot of talk here about the 'best' kind of headphones to use, acoustic resonators for speakers, etc., so maybe someone's got a thought about this:

I've tried _so_ many different types of headphones for CW, and finally have settled on a relatively high quality pair of stereo phones - the comfort for long operating sessions is a big plus. What I'd like to do is resonate them at about 550 Hz. Has anyone tried putting a capacitor in series (probably the best bet) or in parallel with a set of phones to peak up the response at a particular frequency? I've done some experimenting without much in the way of results. I know that a SCAF filter or something would do the trick, but you'd think that it would be possible to kill the extreme highs and lows and put a little peak in there just by resonating it.

Vic K2VCO

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Dan Tayloe-P26412 <Dan_Tayloe-P26412@email.mot.com>

Subject: [17028] VXO Difference in 3rd Overtone vs Fundamental?

Message-ID: <M191570.011.fh37a.1.970410151649Z.CC-MAIL*/OU=SATCG/OU=AZBH/PRMD=MOT/ADMD=MOT/C=US/@MHS>

Is there a difference in the amount one can pull a crystal for use in a VXO depending if it is a third overtone or a fundamental type? I noticed that the 38 special had problems with this type of crystal.

In my portable gear, I would like to have better stability in a smaller package (with less compensation experiments!) than I get right now with varactor based VFOs. I guess a fundamental question would be KHz for KHz in tuning range if a varactor tuned VXO is fundamentally any better than a varactor tuned VFO. It may not be.

Anyway, I was looking at the Digikey Catalog and noticed both 33.333 MHz and 32 MHz third overtone crystals.

If I used 33.333 MHz in a VXO and feed it into a NE602 using its on chip osc at 32 MHz, the mixing action will mix odd order harmonics of both signals. This should get me 100 MHz (third harmonic of 33.333)

mixed with 96 MHz (third harmonic of 32) and net me an output of 4 MHz with considerable tuning range. It would need to be filtered of course to get rid of the other harmonics, in particular 1.333 MHz (x1) and 6.666 MHz (x5).

Pick other crystals to get other tuning ranges that match with the desired IF frequency. Crystals that have a 1 MHz spacing may work better, giving a 3 MHz effective VXO, which could be used with a more standard 4 MHz IF to get 7 MHz

If the 38 special can get 20 KHz swing at 22 MHz, I might be able to get 100 KHz at 4 MHz (due to the effective "100 MHz" VXO used).

Furthermore, I could get 200 KHz range if I use VXO on *both* crystals. As one is tuned higher, the other could be tuned lower.

Most uncompensated oscillators tend to drift lower in frequency as they warm up. One neat effect is that this uses the *difference* between two crystal oscillators drifting the same direction so the net drift at 4 MHz will be improved.

It seems like a neat idea. Any comments?

- Dan Tayloe, N7VE, Phoenix, Az, QRPL # 696, Az ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Randy Hargenrader <randyh@harksystems.com>
Subject: [16993] W3TS de WJ4P
Message-ID: <334C2731.73C5@harksystems.com>

Hey Mike!

I just read the Spartan Sprint results...

What'ja do to get your weight down so low -

remove the rest of the chassis from your radio? hi!

At .8 lbs you're really getting down there. I had to build a radio from scratch in a plastic box to get it that low! Inquiring minds wanna know!

Nice going, BTW!

--

73, (Sir)Randy WJ4P

Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Dana Michael <damichael@amp.com>

Subject: [17039] WJ4P de W3TS
Message-ID: <199704101637.MAA102819@nss2.CC.Lehigh.EDU>

Hi Randy,

Missed you in the Spartan Sprint.

A discription of my 40M version of my SW-80 is on the Adventure Radio Societys page under TRF Challange. It is also discribed in the April QRP Quarterly, page 38.

I used a cut down thin aluminum 3x4x5 Bud box. Cut down to 3/4 inch. I use no back cover or a cardboard back cover at home. I also have a thin plastic back cover. I used a small plastic pot for the RF Attn control and took the back shell off of the tuning pot to save weight. I used phono jacks, because they are lighter.

If you have more questions, drop me another e-mail.

72 es 73, Mike W3TS

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: n4js@amsat.org
Subject: [17067] WM-20
Message-ID: <XFMail.970410170659.n4js@amsat.org>

Well, I was really doing well, building kits that worked right away...Finally blew my good record. I just finished my WM20. Receiver receives fine, lot of noise and foreign broadcast. The Frequency readout is reading "91X" or 92X (X varies) It a KC1-like readout. I checked the L0, and sure enough, instead of 6.2 Mhz, It's around 4.1 MHZ !! I checked to see I got all the caps in the right place. Looks OK, right core and turns on L3 toroid. Now I have to figure it out. This is too much to just take a turn or two off the toroid.

Oh well, this is what makes it challenging!

ves fine, lot of
noise and foreign broadcast. The Frequency readout is reading "91X" or 92X (X varies) It a KC1-like readout. I checked the L0, and sure enough, instead of 6.2 Mhz, It's around 4.1 MHZ !! I checked to see

Sent at 17:06:59 on 10-Apr-97

John L. Sielke n4js@amsat.org n4js@pobox.com
n4js@n4js.ampr.org NJ Grid:FM29LN
<http://www.pobox.com/~n4js>

I_|_| I_| _/_/ |___/ NJ-QRP #57 QRP-L #884 QRP-ARCI #9328
NE-QRP #507 G-QRP #9544 NorCal QCWA FISTS #2781
WIMPS Qs=010 30m=10 17m=0 12m=0 States=02/00/00 Countries=08/00/00

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: n4js@amsat.org
Subject: [17069] WM-20 is OK!
Message-ID: <XFMail.970410181047.n4js@amsat.org>

I got it! It did take removing 2 turns from L3, but now it's on frequency! I counted twice, to make sure I wound it right the first time, and I did. Oh well, it works OK, counter gives right freq. (That little counter is TERRIFIC!). Thanks for the replies.

Sent at 18:10:47 on 10-Apr-97

John L. Sielke n4js@amsat.org n4js@pobox.com
I_|_| I_| _/_/ |___/ n4js@n4js.ampr.org NJ Grid:FM29LN
I_|_| I_| _/_/ |___/ http://www.pobox.com/~n4js
I_|_| I_| _/_/ |___/ NJ-QRP #57 QRP-L #884 QRP-ARCI #9328
NE-QRP #507 G-QRP #9544 NorCal QCWA FISTS #2781
WIMPS Qs=010 30m=10 17m=0 12m=0 States=02/00/00 Countries=08/00/00

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: gsurrency@juno.com (Gary L Surrency)
Subject: [17031] Re: 38 Special Problems (longish)
Message-ID: <19970410.090702.3958.0.gsurrency@juno.com>

Why go to so much trouble when the kit is only 25\$ + \$3 shipping / handling?

Also, I looked at an old computer monitor and found a LM5532 op amp on it! My XYL works as a consultant, so she has access to many dead monitors / power supplies, various adapter cards which yield tantalum caps and crystals. So don't overlook old computers, monitors, and PC cards for parts.

On your problem, check to make sure the CD4066 inputs are tied to Vcc or Vss through a resistor or jumper. Some of the previously posted mods covered this. If these inputs are left floating, the chip does weird things. The TiCK mod frees up some gates in the CD4066 that can be used to help with the T/R switching and DC biasing of the '4066's inputs.

Use good troubleshooting techniques to reverse trace an applied signal

from the '5532 back toward the antenna. A metal tweezer or screwdriver touched to the signal path should produce hum, buzz, or noise along the receiver. And check the voltages you have against what Paul supplied in his troubleshooting voltage chart.

Good luck, but there are still kits available for the 38s if you are really interested in getting "the real thing", now that you have done it the hard way! ;-)

vy 73,

Gary Surrency AB7MY
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH
Az ScQRPions
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [17033] Re: 50/40/30 WAS Reminder
Message-ID: <334e1123.463207969@smtp.usit.net>

On Thu, 10 Apr 1997 15:00:54 GMT, k8cv@juno.com (Walt D Amos) wrote:

>YIPES.....no call included, wonder who I'm looking for ????
>
>Walt K8CV

Sorry -- being medicated for the cold I have, I forgot the sig file!

see below ...

72 es 73 de=20
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>  
Subject: [17013] Re: ARCI

Message-ID: <334C53A3.3E4F@postoffice.worldnet.att.net>

>>>Just A question: Is there a new Web site for the QRP ARCI? I have  
>>>been trying to connect and I am getting nowhere.  
>>>Thanks

Try <http://RTPnet.org:80/~qrp/>

--

\*\*\*\*\*  
\*\*\*\*\*  
73 de  
KC8DGU  
Tom Isgro  
OHIO

|               |            |          |            |
|---------------|------------|----------|------------|
| 10-X #68364   | QRP-L #945 | ARS #203 | FIST #2360 |
| C.A.T.T #2115 | NORCAL     | ARRL     |            |

\*\*\*\*\*  
\*\*\*\*\*

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Larry East <w1hue@amsat.org>  
Subject: [17035] RE: ARCI WEB site  
Message-ID: <2.2.16.19970410161832.13d70ede@eloi>

>Just A question: Is there a new Web site for the QRP ARCI? I have been  
>trying to connect and I am getting nowhere. Thanks  
>

Try: <http://RTPnet.org:80/~qrp/>  
Worked for me just a couple of minutes ago.

72, Larry W1HUE/7

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: PDouglas12@aol.com  
Subject: [17008] Re: Doug DeMaw's Noise eliminator  
Message-ID: <970409223922\_-435949641@emout07.mail.aol.com>

In a message dated 97-04-09 21:18:09 EDT, you write:

<< Was the article published in QST, 73, CQ or what??? Please someone help >>

The QRM Squasher was published by DeMaw in the June '96 CQ magazine. Follow up article on local broadcast overloading cure (filter, if needed) is in the Dec issue of the same year.

72,

Preston WJ2V

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: k7sz@juno.com (Rich H Arland)  
Subject: [17068] Re: Doug DeMaw's Noise eliminator  
Message-ID: <19970410.215321.6967.6.K7SZ@juno.com>

Hang on a few months....MJF is coming out with their version.

73 rich K7SZ

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: john andrews <jm165723@eee.org>  
Subject: [17010] Re: echos on 80mtrs  
Message-ID: <334C5E15.6D19@eee.org>

Randy Hargenrader wrote:

>  
> Hmmm.. don't know if I should report this or not!! :)  
> I'm hearing echos of my cw on 80mtrs at 0258Z (4/9/97).  
> At 5 watts they are barely noticable, at 10 watts definently there.  
> Anyone else notice this phenomenom? Anyone else brave enough  
> to admit it?  
> --  
> 73, (Sir)Randy WJ4P  
> Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

Sir Randy:

Lest anyone say you are nuts, I noticed this first in 1973 while in Germany as DA1JA. No specific propagation indicators and weird sounds like a "bubbly" noise. LDE's(Long Delayed Echos) have been reported for years. Most prevelant in early spring. Someone said

it is an effect of the northern lights.

Ya gotta hear it to beleive it!

72, John- N5INZ

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Randy Hargenrader <randyh@harksystems.com>  
Subject: [17012] Re: echos on 80mtrs  
Message-ID: <334C5F8F.4737@harksystems.com>

Thanks John!

I have had some VERY good echos in the past on 80mtrs.  
I even have recordings. The best one shows an echo with  
a delay that equates to one circle of the earth (at light  
speed). I have a .wav of it if youre interested.  
I used to handle traffic alot on 80mtrs long ago and found  
myself operating on 80mtrs fairly late. One time the echos  
were so strong I thought someone was goofing with me and I  
had to stop sending the message traffic several times until  
I figured out what it was.

--

73, (Sir)Randy WJ4P  
Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Bob Roach <KE4QOK@worldnet.att.net>  
Subject: [17019] Re: echos on 80mtrs  
Message-ID: <19970410121716.AAA26568@LOCALNAME>

At 03:27 AM 4/10/97 +0000, you wrote:

>> I'm hearing echos of my cw on 80mtrs at 0258Z (4/9/97).  
>> At 5 watts they are barely noticable, at 10 watts definently there.

>Sir Randy:

>

>Lest anyone say you are nuts, I noticed this first in 1973 while  
>in Germany as DA1JA. No specific propagation indicators and weird  
>sounds like a "bubbly" noise. LDE's(Long Delayed Echos) have been  
>reported for years. Most prevelant in early spring. Someone said  
>it is an effect of the northern lights.

>

>Ya gotta hear it to beleive it!

Hi All,

If this a true reflection what is the distance to the reflector. (time X speed of light) One pass around the world would take about .18 seconds which might be decernable as an echo???????

(o o)

-----o00\_( )\_00o-----

73 es TNX

KE4QOK Real radios glow in the dark.

Bob Power is no substitute for skill.

If it stayed up last winter, it was too small.

136 Hermitage Rd.

Newport News, Va. 23606 KE4QOK@worldnet.att.net

(757)930-0348

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Wa2eaw@aol.com

Subject: [17003] Re: latest prop. news

Message-ID: <970409215057\_1917743414@emout02.mail.aol.com>

Kent;

You had me in a spin for a moment. CME to me is " continuing medical education".

Took me a few lines to get your drift. Thanks for the chuckle at my expense.

I am always on the look-out or pleasurable "CME" credits.

72/73 de WA2EAW...Bob

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: "Carol N. Wright" <cnw@hiwaay.net>

Subject: [17062] Re: Pin out for a MRF476/2SC2075?

Message-ID: <Pine.OSF.3.94.970410144831.9261I-100000@fly.HiWAAY.net>

On Tue, 8 Apr 1997, Bill Acito 08-Apr-1997 1355 wrote:

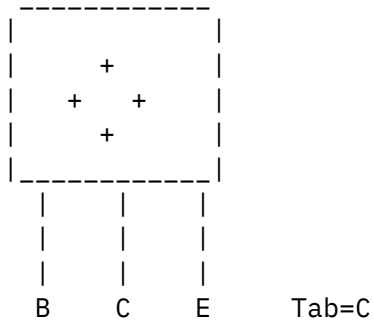
>

>

> Looking to put a little kick in my SW40. Anyone have the pin

> outs

> for a 2SC2075, to replace a 3553?



Also, this is looking from the front of the transistor. The 4 plus signs are the hole on the tab. Not pretty but I hope that it got the info across to you Bill and Gang. I get this info out of the great NA5N Data Book.  
Best 72/73 DE Matt, AE4JM

--

JCARC--ARCI 9178--ARRL--ARRL ORS--Ten Ten 66932--VP 2855--WAS  
Matt Wright, ph. (205)228-6547, packet: AE4JM@K4BFT.#HSV.AL.USA.NA  
email: cnw@HiWAAY.net snail mail:8679 Co. Rd. 19, Section, AL 35771  
Rigs built: Ramsey mini rcvr-40mtrs, NC38S, SW30-40, NC49'er, NC40A with KC1  
WIMPS: Qs=16 30m=15 17m=1 12m=0 STATES=11/01/0 DX=00/00/00

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: john andrews <jm165723@eee.org>  
Subject: [17061] Re: Product Support?  
Message-ID: <334D4682.3B20@eee.org>

SGCMKTG@aol.com wrote:

>  
> John,  
>  
> Thank you for your interest in SGC and Index Laboratories.  
> In response to your inquiry and concerns, we have attached a statement from  
> Bruce Franklin of Index Laboratories.  
>  
> The following letter was received from Index Laboratories by SGC on 4/9/97.  
>  
> The purpose of this letter is to clarify the relationship between SGC, Inc.  
> And INDEX LABORATORIES.  
> SGC has contracted with Bruce Franklin for engineering design services to  
> develop a new transceiver, the SG-2020.  
> SGC has not acquired INDEX LABORATORIES, its product line nor its customer

> service obligations.  
> Warranty service for the QRP PLUS Transceiver will continue to be provided by  
> IINDEX LABORATORIES.  
> SGC will be responsible for manufacturing, sales and customer support for the  
> SGC 2020 transceiver currently under development.  
> Sincerely,  
>  
> Signed "Bruce Franklin"  
> INDEX LABORATORIES  
> 9318 Randall Dr. NW  
> Gig Harbor, WA 98332  
>  
> The latest details and updates regarding the SG-2020 transceiver will be  
> posted regularly at <http://www.sgcworld.com>  
>  
> Best Regards,  
>  
> Robert Gregg  
> Sales Director  
> SGC, Inc.  
>  
> The SGC Building 13737 S.E. 26th Street  
> Bellevue, Washington 98005 USA  
> TEL (206) 746-6310 \* 1-800-259-7331 \* FAX (206) 746-6384  
> E-mail [SGCMKGT@aol.com](mailto:SGCMKGT@aol.com) \* [www.sgcworld.com](http://www.sgcworld.com)

As received from SGC.

72, John-N5INZ

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Brian Cieslak <[brianc@ams-i.com](mailto:brianc@ams-i.com)>  
Subject: [17022] RE:PROPAGATION: chicken little report  
Message-ID: <c=US%a=\_%p=Adaptive\_Micro\_S%l=AMS-I\_SERVER\_-970410131607Z-4265@ams-i-server-1.ams-i.com>

Well, at least the solar astronomers erred on the side that we're still around to complain about it. Just imagine if they grossly underestimated the energy that hit us. Do you think they would tell us if we were about to be incinerated?

Brian AE9K

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Larry East <w1hue@amsat.org>  
Subject: [17037] RE: QRP+ Support  
Message-ID: <2.2.16.19970410161836.13d7bf12@eloi>

A clarification is in order. The last line of my original post was:

>PS -- Think I'll pass on any QRP-L group buy for the new SGC rig...  
>

That was probably misleading to some folks. What I meant to say was:

... Think I'll NOT PARTICIPATE IN any QRP-L group buy ...

72, L.

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Larry East <w1hue@amsat.org>  
Subject: [17049] RE: QRP+ Support  
Message-ID: <2.2.16.19970410181159.13d702b0@eloi>

Here is the reply that I just received from SGC regarding future QRP+ support:

>Larry,  
>  
>Thank you for your interest in SGC and Index Laboratories.  
>In response to your inquiry and concerns, we have attached a statement from  
>Bruce Franklin of Index Laboratories.  
>  
>The following letter was received from Index Laboratories by SGC on 4/9/97.  
>  
>>The purpose of this letter is to clarify the relationship between SGC, Inc.  
>>And INDEX LABORATORIES.  
>>SGC has contracted with Bruce Franklin for engineering design services to  
>>develop a new transceiver, the SG-2020.  
>>SGC has not acquired INDEX LABORATORIES, its product line nor its customer  
>>service obligations.  
>>Warranty service for the QRP PLUS Transceiver will continue to be provided by  
>>INDEX LABORATORIES.  
>>SGC will be responsible for manufacturing, sales and customer support for the  
>>SGC 2020 transceiver currently under development.  
>>Sincerely,  
>>  
>>Signed "Bruce Franklin"  
>>INDEX LABORATORIES



>>9318 Randall Dr. NW  
>>Gig Harbor, WA 98332  
>  
>The latest details and updates regarding the SG-2020 transceiver will be  
>posted regularly at <http://www.sgcworld.com>  
>  
>Best Regards,  
>  
>Robert Gregg  
>Sales Director  
>SGC, Inc.  
>

It appears from this that the new SG-2020 is being designed (at least in part) by Bruce F. rather than SGC. Nothing was said about whether or not the QRP+ will remain in production, but it appears that it won't since folks have reported getting refunds on recent orders. (At least for upgrades of old +'s ... has anyone received a new rig lately?)

Lets hope that Bruce becomes more responsive when he is (I assume...) no longer involved in rig manufacturing. (Wishful thinking?? Guess we'll just have to wait and see...)

72, L.

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Ed Loranger <we6w@qsl.net>  
Subject: [17051] Re: QRP+ Support  
Message-ID: <334D305D.3A24@qsl.net>

Two off the top of my head:

- 1) capacitance at this point can significantly bypass the coil inductance.
- 2) Depending on the phase shift, the rf voltage differential is greatest between the ends. So it's not a good idea to get them too close!

Note: Some coil winding articles I've read mention winding half of the coil and then bring the wire across the torroid to where this 30 degree point is and winding back up to the middle. Apparrently this reduces both capacitance and rf voltage problems.

-Ed

--

72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)  
OHR-100, Pixie2, Johnson Viking II w/VFO.  
mailto:we6w@qsl.net QRP-L member #1068.  
<http://www.qsl.net/we6w>

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: "John A. Evans - N3Q00" <jaevans@cos.cst.titan.com>  
Subject: [17045] Re: QRP\_SPEAKER\_RECOMMENDATIONS?  
Message-ID: <199704101728.NAA118976@nss2.CC.Lehigh.EDU>

> Anyone have any suggestions for a small speaker to put inside QRP =  
rigs?=20  
>=20  
> Marty WB8FNH  
>=20  
>=20

I can't think of any names off hand !!!

john

-----  
John A. Evans                      Chief System Administrator  
Office: (719) 528-1800 x164           Titan Client/Server Technologies  
Fax:     (719) 528-1275               1115 Elkton Dr, Suite 200  
email:   jaevans@cos.cst.titan.com   Colorado Springs, CO 80907-3535  
-----

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045  
CQrp #15 NJ-QRP #50 AK-QRP #52 NW-QRP #454  
Personal Web Page: <http://www.geocities.com/capecanaveral/9773/>  
-----

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: PDouglas12@aol.com  
Subject: [17048] Re: QRP\_SPEAKER\_RECOMMENDATIONS?  
Message-ID: <970410140213\_-133886272@emout07.mail.aol.com>

In a message dated 97-04-10 13:45:36 EDT, you write:

<< Anyone have any suggestions for a small speaker to put inside QRP rigs?  
>>

Most of the good speakers will be at FDIM presenting papers on May 16th. And

my recollection is that they are all much too big to fit inside a QRP rig--mostly too tall, but some too wide too!

....Couldn't resist.

Preston WJ2V

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: Kory Hamzeh <kory@avatar.com>  
Subject: [17052] Re: QRP\_SPEAKER\_RECOMMENDATIONS?  
Message-ID: <Pine.BSI.3.91.970410112526.4146B-1000000@avatar.avatar.com>

How about Dr. Ruth? She is a small, good speaker.

On Thu, 10 Apr 1997, John A. Evans - N3Q00 wrote:

>  
> > Anyone have any suggestions for a small speaker to put inside QRP rigs?  
> >  
> > Marty WB8FNH  
> >  
> >  
>  
> I can't think of any names off hand !!!  
>  
> john  
> -----  
> John A. Evans                      Chief System Administrator  
> Office: (719) 528-1800 x164        Titan Client/Server Technologies  
> Fax:     (719) 528-1275            1115 Elkton Dr, Suite 200  
> email:   jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535  
> -----  
> Norcal   #262   QRP-L   #219   QRP-ARCI   #8303   NE-QRP   #213   CQC   #045  
> CQrp     #15    NJ-QRP   #50    AK-QRP     #52     NW-QRP   #454  
> Personal Web Page: <http://www.geocities.com/capecanaveral/9773/>  
> -----  
>  
>

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997  
From: "Bob Edwards, W4ED" <rbe@atlanta.com>  
Subject: [17055] Re: QRP\_SPEAKER\_RECOMMENDATIONS?  
Message-ID: <334D688A.590E@atlanta.com>

HIMES@idic11.idi.oclc.org wrote:

> Anyone have any suggestions for a small speaker to put inside QRP rigs?

Marty,

Assuming you were asking about an acoustic emitter :

Consider a Piezoelectric Speaker Element from RS # 273-091.

It's cheap and relatively small.

Sound pressure frequency curve is provided by RS. The lowest freq strong peak is at 750 Hz, which is still a little high for my CW tone taste. Its not real small either, about 1 3/4" dia with mounting tabs at 2". A good feature should be that it is less susceptible to moisture. I have a couple that I've experimented with in acoustic tuned speakers, and am pleased with their performance in that application.

The moisture problem hit me two years ago during field day when my double tuned speaker (typical surplus magnetic speakers) went flat. The rig was in a tent, rain was heavy, then sun came back out. Humidity was terrible. I put on headphones but missed the extra natural accoustic filtering.

Keep in mind this is a very capacitive device (55,000pf) and is meant to be driven by a few volts. Rated for 50 volts peak to peak max, gives an idea about its drive. Rated impedance is 3500 ohms at 750 Hz. I use a step up transformer when driving one from the FT-840. The speaker does not have a smooth frequency curve. It gives a "tinny" sound to voices, but still very readable.

--

Bob 72/73

<http://www.qsl.net/w4ed>

W4ED x\_AE4CA nr Atlanta @EM73wt

...."QRP", more from less....

```
      /|
     / |
    /  | \
   /| / E | \
  /_|/____|__\
 [ \--===== -/
```

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From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Claton Cadmus" <aplitech@Spacestar.Net>
Subject: [17059] Re: QRP_SPEAKER_RECOMMENDATIONS?
Message-ID: <199704101951.0AA25673@Spacestar.Net>

Marty WB8FNH wrote:

: Anyone have any suggestions for a small speaker to put inside QRP rigs?

I just saw this speaker in the Hosfelt Catalog I thought might be good for QRP rigs. I haven't tried it of course but the specs and size look good for small rigs:

1" dia x 3/8 deep
8 ohm .1 watt
Freq. Resp. 700-3500 Hz

Catalog #13-184 75cents each

Hosfelt Electronics 1-800-264-6464

Hope this Helps

73 de KA0GKC Claton Cadmus
E-mail cla@spacestar.net
If you live in Minnesota check out this webpage!
<http://www.spacestar.net/users/aplitech/mnqrp/>

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Larry East <w1hue@amsat.org>
Subject: [17036] RE: SGC Info-update
Message-ID: <2.2.16.19970410161837.10d722b2@eloi>

>I spoke with Mr Peter Kennedy, of SGC Inc, on the telephone today and
>asked him if he was aware of the discussion on thew QRP-L reflector,
>about the concerns of the Index Labs customers. He said he was aware of
>it, but indicated that he may not see or read all of it. I didn't ask
>him any specific questions about the business activity, or about whT
>OTHER INPUT HE MIGHT HAVE, but asked if he would mind if I dropped off
>copies of the various postings that I have saved. He said he didn't
>mind, but would rather people would mail them directly to him at SGC.
> The address is: Mr. Peter Kennedy
> SGC INC

> 13737 SE 26th
> Bellevue, Wa, 98005
>

SGC also has an email address: SGCMKTG@aol.com

However, a note I sent to them on Tuesday asking for clarification on QRP+ Support has not been answered.

72, L.

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: TMOLL@aol.com
Subject: [16998] Re: SLV coils
Message-ID: <970409205332_-167520979@emout01.mail.aol.com>

<< The PVC wedge fitting that is supposed to go
onto the bottom of the pole and replace the screw cap on the Black Widow
is a touch too large inside diameter which means that the fit on the
bottom of the Balck Widow is a bit loose and sloppy. >>

I noticed the same thing. After pondering the situation a bit, and tinkering around, I found that putting the epoxy on the mating surfaces, sliding it together, and then rolling up 3 or 4 sheets of 8.5" X 11" paper around the pole and using it as a shim to center the fitting around the pole worked nicely. This would keep it centered while the epoxy dried. It actually stood upright unsupported on the kitchen counter overnight while it set up. Then I removed the paper and put another bead of epoxy around the top to seal that joint and give it extra strength. I would not recommend using hot glue as you mentioned. Epoxy is not expensive. I also replaced the coil wire loop ends with some ring tongue lugs for a more solid connection to the driven elements. I used the suggestion of coax braid for the bottom element section, and soldered lugs on the ends of it also. Just use a short machine screw to put them together. A box style ground lug fits nicely over the rod tip and just acts like a set screw to hold the top element in place. Works great.

Good luck !

72, Tom Moll, NoBS

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [17024] Re: Star Wars Trivia - really NOT QRP related
Message-ID: <199704101415.IAA02768@zia.aoc.nrao.edu>

Luke Skywalker was born on "Tatooine" ???

There's a QRP To The Field site for someone this year :-)

Paul NA5N

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Ed Manuel" <n5em-qrp@msn.com>
Subject: [17058] RE: Star Wars Trivia - really NOT QRP related
Message-ID: <UPMAIL06.199704101934180494@msn.com>

Gang,

Sorry, Luke was RAISED on Tatooine - no word yet on where he was BORN.

Ed - A QRPer and a Sci-Fi Fan (but then, aren't we all?).

From: owner-qrp-1@Lehigh.EDU on behalf of Paul Harden
Sent: Thursday, April 10, 1997 9:15 AM
Subject: Re: Star Wars Trivia - really NOT QRP related

Luke Skywalker was born on "Tatooine" ???

There's a QRP To The Field site for someone this year :-)

Paul NA5N

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Dan Hogan <dhhogan@lightside.com>
Subject: [16996] Re: toroid question.
Message-ID: <3.0.16.19970409151931.22c77886@mail.lightside.com>

Brian:

I was taught to evenly space them around the toroid. Then you can use the spacing adjustment to fine tune.

72/73

Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal #1806,
dhhogan@lightside.com ARRL, ARCI #3847, G-QRP #9533, FISTS #2949
Lat. 34d 03.5'N Lon. 117d 56.0'W Grid: DM84wc

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: "Genevieve A. Winkler" <GDWinkler@compuserve.com>
Subject: [17015] Re: toroid question.
Message-ID: <199704100222_MC2-140B-89B5@compuserve.com>

Hi Gang,

Re toroid inductance. I think Ed is wrong. The distributed capacitance is trivial, too small to make such a large difference in the observed inductance when the windings are compressed, compared to a more spread out configuration.

I think that flux leakage is the culprit. These powdered iron cores are not all that effective at keeping all the lines of flux completely within the core. The red cores have a μ (mu) of only 10, and the yellow ones 8. That means the core likes to have magnetic flux flowing through it 8 times more than air does. (Sorry, I anthropomorphize everything!). Now those ferrite cores, with a μ of 950 (the 43 mix) really hang onto the flux, and I doubt that moving the turns around on them will make much difference (I haven't tried it, but I will, if I can find the time.)

When you spread the turns out, not all the flux passes through each turn, so the inductance is less.

I am not an engineer, and could be wrong here, but this "feels" right (and boy, I've been stung on THOSE things before). Does anyone out there know for certain sure?

Dan Winkler N7IVR Seattle WA

>>could have wound it with widely spaced turns all the way around the
>>toroid or close turns just along a 1/4 of the form.

>> Or is there no difference?

>There is a difference.

>Inductance is principally determined by the number of turns on the toroid.
>However, there is also an electric field between adjacent turns which
>establishes a capacitance. Additionally the value of this distributed
>capacitance is determined by the number of turns and the spacing between
>these turns.

>We see the effects of this capacitance in various ways. For example, the

>formula for L is $N^2 \times A_l$ (where A_l is a constant based on the core
>characteristic).

>Wind a specified number of turns on a core and measure the inductance. It
>will not be exactly as predicted by the above equation. Is the equation
>wrong? No, it is due to the distributed capacitance. Some might argue that
>the result is different because of variances in A_l due to manufacturing.
So

>now using the same core, wind another inductor with more or less turns and
>again measure the inductance. Now solve the above equation for A_l with
the

>2 sets of L and N. You will get different values for A_l . But A_l is a
>constant. The answer is due to the difference in distributed capacitance
>present in both cases.

>What you measured is the apparent inductance (and not the true
inductance).

>You can easily determine an inductors true inductance by taking a pair of
>frequency measurements with the inductor in a tuned circuit using two
>different values of know capacitance.

>True or False?

>When you squeeze (or spread) the turns an inductor, you can change the
>nominal inductance (say +/- 5%)?

>73,

>Ed, W1AAZ

>PS: Are you sure it's not the distributed capacitance and not the actual
>inductance that changed?

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: [17047] Re: toroid question.
Message-ID: <n1Y9bDAo0ATzEwr3@lfheller.demon.co.uk>

In message <c=US%a=_%p=Adaptive_Micro_S%l=AMS-I_SERVER_-970409191148Z-
4150@ams-i-server-1.ams-i.com>, Brian Cieslak <brianc@ams-i.com> writes
>I know this is probablyanswered in Paul harden's book that I hope to get
>soon but things are slow at work to day so I thought I would 'ask the
>experts'

>
>When designing a toroid for a specific value inductance..do you take
>into account that the windings are evenly spaced all the way around the
>core or if the windings are close wound on the core leaving a big
>section of it without windings...I was contemplating this when winding
>the toroid for the 38 s that had only 8 turns on it (i think it was 8) I
>could have wound it with widely spaced turns all the way around the
>toroid (which is what I was always taught) or close turns turns just
>along a 1/4 of the form. Or is there no difference?

For optimum Q, you should leave a gap of about 30 degrees, according to the ARRL Handbook. I don't know why this is so, does anyone else?

Leon

--

Leon Heller

Amateur radio callsign: G1HSM

Email: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>

Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997

From: Ed Loranger <we6w@qsl.net>

Subject: [17056] Re: toroid question.

Message-ID: <334D3E8F.6F8E@qsl.net>

Folks: I replied to the wrong post.

Here's what I meant to respond to:

Leon Heller wrote:

>
> In message <c=US%a=_%p=Adaptive_Micro_S%l=AMS-I_SERVER_-970409191148Z-
> 4150@ams-i-server-1.ams-i.com>, Brian Cieslak <brian@ams-i.com> writes
> >I know this is probably answered in Paul harden's book that I hope to get
> >soon but things are slow at work to day so I thought I would 'ask the
> >experts'
> >
> >When designing a toroid for a specific value inductance..do you take
> >into account that the windings are evenly spaced all the way around the
> >core or if the windings are close wound on the core leaving a big
> >section of it without windings...I was contemplating this when winding
> >the toroid for the 38 s that had only 8 turns on it (i think it was 8) I
> >could have wound it with widely spaced turns all the way around the
> >toroid (which is what I was always taught) or close turns turns just
> >along a 1/4 of the form. Or is there no difference?
>
> For optimum Q, you should leave a gap of about 30 degrees, according to

> the ARRL Handbook. I don't know why this is so, does anyone else?
>
> Leon
> --
> Leon Heller
> Amateur radio callsign: G1HSM
> Email: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
> Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

Two off the top of my head:

- 1) capacitance at this point can significantly bypass the coil inductance.
- 2) Depending on the phase shift, the rf voltage differential is greatest between the ends. So it's not a good idea to get them too close!

Note: Some coil winding articles I've read mention winding half of the coil and then bring the wire across the torroid to where this 30 degree point is and winding back up to the middle. Apparently this reduces both capacitance and rf voltage problems.

-Ed

--

72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
OHR-100, Pixie2, Johnson Viking II w/VFO.
<mailto:we6w@qsl.net> QRP-L member #1068.
<http://www.qsl.net/we6w>

--

72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
OHR-100, Pixie2, Johnson Viking II w/VFO.
<mailto:we6w@qsl.net> QRP-L member #1068.
<http://www.qsl.net/we6w>

From owner-qrp-l@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Jess Gypin <jgypin@bi.com>
Subject: [17060] Re: Tuning headphones
Message-ID: <334D45CD.4B36@bi.com>

Vic Rosenthal wrote:

>
> There's been a lot of talk here about the 'best' kind of headphones to
> use, acoustic resonators for speakers, etc., so maybe someone's got a

> thought about this:
>
> I've tried _so_ many different types of headphones for CW, and finally
> have settled on a relatively high quality pair of stereo phones - the
> comfort for long operating sessions is a big plus. What I'd like to do
> is resonate them at about 550 Hz. Has anyone tried putting a capacitor
> in series (probably the best bet) or in parallel with a set of phones to
> peak up the response at a particular frequency? I've done some
> experimenting without much in the way of results. I know that a SCAP
> filter or something would do the trick, but you'd think that it would be
> possible to kill the extreme highs and lows and put a little peak in
> there just by resonating it.
>
> Vic K2VCO

Let me add a comment here as well. Most headphones are fed "in phase". I learned trick from somewhere to take apart one side of the headphones and reverse the wires on just one of the speakers. This causes the other side to be fed "out of phase" (the authors words not mine!) and makes the CW sound like it is inside your head instead of external. I know this sounds bizarre, but I tried it on a pair of stereo phone and it worked!

Best
Jess N0TFI

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: DCrespy@aol.com
Subject: [17004] Re: Value of FT101-ZD
Message-ID: <970409215126_2081812401@emout03.mail.aol.com>

Tim

Mine was a great rig.. until I bought my TS 850, I had not had a receiver to match the ZD. In fact QST pointed out the outstanding receive dynamics in their review of the radio. Maybe the best early example of the thing that TEN TEC pushes in their radio ads about the value of crystal mixing.

If it is a MK2 or MK 3 (WARC), my guess is that it is worth about \$500... I traded mine (to my great regret) on a TS 430 about 10 years ago for around \$350 or \$400.

If it is in exceptional shape.. let ME know!!

72/73

Harry KG5LO
Saline MI

From owner-qrp-1@Lehigh.EDU Thu Apr 10 18:04:43 1997
From: Zack Lau <zlau@arrl.org>
Subject: [17038] Re: W3TS de WJ4P
Message-ID: <334D15FD.7B46@arrl.org>

Randy Hargenrader WJ4P wrote:

> What'ja do to get your weight down so low -
> remove the rest of the chassis from your radio? hi!
> At .8 lbs you're really getting down there. I had to
> build a radio from scratch in a plastic box to get it
> that low! Inquiring minds wanna know!

I'd build the radio over thin single sided circuit
board--perhaps 10 or 15 mil thick G-10. Also, get
1/2 oz copper typically used for plated through hole
boards. I think a box made out of paper laminated
styrofoam would be lighter than plastic.
--Zack Lau W1VT zlau@arrl.org